131 length and a mile wide. "Howar" means "Young Camel" and the island was so called because it is similar in shape though smaller than Bahrain, and so was described as its offspring.

There are many other little islands in the Bahrain archipelago ; some contain small villages or fishermen's huts while others are deserted except during the occasional visits of migratory birds or pearl divers who come to the islands during the diving season to draw water from the freshwater springs.

311 Along the northern coast of Bahrain there is a narrow strip of land
137 some three miles wide which is under cultivation. The fertile gardens containing date and loz (Indian almond or Terminalia) pomegranate, banana and fig trees are irrigated from many natural springs and artesian wells. But in the waterless areas south of the cultivation, in the centre of the island, only sparse and hardy desert flora exists. Although this desert may seem bare to the eyes of a visitor accustomed to the lush greenness of Europe or the States, it is in fact covered with a great variety of desert plants which were found, in a recent survey, to include some 200 species.

133 Beyond the cultivated area the land is barren and the landscape consists of low rolling hills with numerous rocky cliffs and dry wadis. Most of the Islands of Bahrain are surfaced with hard limestone rock, covered in many places with sand dunes, and, in the case of the main island, with pre-historic tumuli. From the shore line the topography rises gradually towards the centre where it again drops off into a basin surrounded by steep cliffs. Towards the centre of the basin there is a very pronounced rocky promontory known as "Jebal ad-Dukhan," *the "Mountain of Smoke,"* a name given to it because of the vague and hazy appearance it often presents, particularly during the hot summer months. The Jebal is only 450 feet above sea level and 250 feet above the surrounding plain but often, when mist surrounds its base, it gives the impression of being a considerable mountain.

Although Bahrain is a small country yet it displays a very varied
226 landscape and many surprising contrasts between old and new. It
228 is primarily a sea faring state. The brilliant blue and green waters, studded with white sails, which surround the islands provide the people of Bahrain with fish, which they catch from boats and in traps, fresh water, from the submarine springs, coral stone for building and pearls which made Bahrain such an important trading centre in the past.
361 The coastal towns have an attractive appearance. Manama's water front is lined with high white houses and beyond the town date gardens extend in an unbroken line down to the water's edge. Roads in the northern part of Bahrain pass through avenues of tall and stately date palms, bearing great bunches of golden, red and yellow fruit during
133 the summer months. The south of the island is a miniature desert and in the foothills around the Jebal there are many little wadis which
000 after the rainy season are bright with desert flowers and shrubs. Even

Some twenty years ago a Danish scientific expedition paid two visits to the Persian Gulf to report on the fish found in it. They discovered that there were over 400 species. 114 136

AGRICULTURE

Parts of Bahrain have always been fertile and very probably in ancient times more land was under cultivation than is being used today. The gardens of Bahrain are mentioned by many ancient visitors to the islands. The captains of Alexander's ships described Tylos, the ancient name of Bahrain, as "well-wooded and productive" while Idrisi, writing in the 12th century, says that the "capital of Awal (Bahrain Island) is Bahrain; this is a town well populated whose environs are fertile and produce corn and dates in abundance." It could be that the capital of Bahrain mentioned by Idrisi was Bilad al-Qadim, the description would seem to imply this. 311 361

Formerly the Bahrain gardens were irrigated from natural springs and surface wells, the water either flowing from the springs into the gardens or being lifted from wells to the level of the land by various forms of water scoops. The most commonly used is the Shaduf. A man stands near the edge of the well and draws up the water in a sheep skin bag attached by ropes to a counter-balanced pole. In larger wells donkeys or oxen are used, walking endlessly up and down a ramp pulling the water to the surface from where it runs down into irrigation channels. As the rainfall in Bahrain is almost negligible all agriculture depends upon irrigation. 312

In the 20's and 30's Major Frank Holmes drilled many artesian wells in Bahrain which completely changed Bahrain's system of irrigation. By introducing these wells into the island Major Holmes did much to increase the area of land which could be cultivated, but *artesian wells turned out to be a mixed blessing*, for in the following years so many wells were drilled that the water head went down and some of the gardens in the south of Bahrain dried up. Today this problem is being met by a government Water Committee which decides whether and under what conditions new wells may be drilled, it tries to ensure that the water resources of the islands are maintained at their present level or even increased by the utilisation of the many large springs of fresh water which lie under the sea around the shores of Bahrain. 312 647 653

The two commonest crops in Bahrain are dates and lucerne (alfalfa). the latter is often grown in the shade of the date palms where its vivid greenness provides a contrast to the brown and grey-green of the date palms. There is little good fruit in Bahrain although a certain number of fruit trees are cultivated, these include citrus, tamarind, pomegranate, fig, guava, terminalia (indian almond) mango, bananas, grapes and kanard (a small apple-like fruit). European vegetables are grown in the cold weather and other ground crops include sweet potatoes, melons, tomatoes, ladies fingers, egg plants, onions, garlic and pumpkins. 241

ZELLAQ

361 South again of Malakiya is Zellaq, the southernmost village on the
342 western Coast of Bahrain and approximately three miles west of Sakhir. A road runs from Zellaq to Awali and is much used by BAPCO employees coming to swim at the former place. The houses of Zellaq village, which are of stone, are built along the shore and many of them are large and spacious. As a result of the activities of BAPCO, Zellaq village has increased in size and prosperity and now contains a number of substantial white stone buildings which are conspicuous from a long distance across the flat and sandy plain that surrounds it.

162 The inhabitants of Zellaq are Sunni Arabs; some are from the Dawasir tribe, and many of them are dependents of the Ruling Family.
311 North of the village there are a number of large gardens, irrigated by innumerable artesian wells, which are owned by members of the Ruling Family and by their servants; these gardens form a green belt along the two miles of coast between Zellaq and Sedad.

312 The Bahrain Petroleum Company has a pump house at Zellaq which supplies Awali with much of its water and Zellaq was also once the discharging point for tankers bringing crude oil from Saudi
517 Arabia, before the submarine pipe-line was laid. Near the pumping station is the BAPCO Plage, the excellent bathing place which is much used by the employees of BAPCO, particularly in the Summer evenings.

RAS AL-BARR

529 This, the southernmost point of the Bahrain islands, is a popular
484 place for summer picnics, but the approaches to it are difficult, and
491 although never dangerous they can easily cause trouble to visitors by the softness of the sand. It is best to travel in parties with not less than two cars, so that one can come to the help of the other if necessary, and care should be taken to keep to the tracks, however faintly indicated rather than to carve out new roads in the desert. The road to Ras al-Barr from Zellaq first passes through Mutalla, the Ruler's hunting lodge, while that from Awali past the Jebel passes another hunting lodge at Rumaitha before joining the Western road at Akala. From here the road goes south, past the swamps on the coast and along the narrow strip of sand which marks the end of the island.

136 In certain seasons of the year the shores along this part of Bahrain
262 are covered with the eggs of sea-birds, and many Arab dhows anchor off the coast while the crews remove the eggs for food. If one is lucky, while driving down the coast, hare and gazelle may be seen, as well as rose-tinted flamingoes on the shore.

MUHARRAQ ISLAND

MUHARRAQ

491 The visitor from Manama approaches Muharraq by crossing the
486 1½ mile long causeway and Shaikh Hamed Bridge, completed in 1942,

organize the secondary school system. The teachers received from £25 to £30 a month and "bed and board" paid by the Bahrein government. Interestingly enough, the first director of the first school opened at Muharraq was the present Saudi Arabian Minister to London, Sheik Hafiz Wahba.

At present, there is no newspaper in Bahrein. A weekly newspaper, Al Bahrein, was founded in 1939, but ceased its publication after the death of its publisher, Abdallah Za-id. In 1940 a broadcasting station was built, and the Al-Bahrein Radio started short-wave broadcasts on a 23-m, 50 band on November 4. During the war, Radio Bahrein was most useful to the Allied cause, since its four daily news broadcasts in Arabic and Persian were heard more easily throughout the Near East than those of Egypt.

Besides the schools, two "circles" for the discussion of political and literary matters were established in 1935 under the patronage of the brother of the Sheik. There was already a Cercle Israelite in the island.

ECONOMY

The geographical features and the geological formation of the islands greatly reduce the economic value of Bahrein. The scarcity of water and the sandy nature of the soil exclude agricultural development. The application of modern methods of agriculture and the utilization of artesian wells and gasoline operated pumps are too recent and too inadequate to make Bahrein even partially independent of imported food. For many years to come, and probably forever, the islands will be dependent on food, meat, vegetables, and fruits brought chiefly from the Persian or Arabian mainland.

Fortunately, in most of the islands of the Persian Gulf and the surrounding regions, wherever water is found naturally or captured artificially, date palms grow with astonishing ease. The northern part of Bahrein Island, thanks to natural springs and more recently to artesian wells, is practically a string of oases with palm groves numbering several hundred thousands.